

A metering device that includes a housing-(1) defining a cylindrical chamber-(2) containing a reciprocating shuttle-(3). The two opposed end parts of the chamber are interconnected by fluid flow ducts-(11,12) to a cylindrical valve bore-(13). Contained within the valve-(4) is a rotary valve rod-(17) driven rotationally by a stepping motor-(M). The valve rod-(17) has part cut away to form channels or recesses-(18,19,20,21,22). In one rotational position of the valve rod-(17) a flow path is established from an inlet-(16) to one end of the chamber-(2) and a separate flow path is established from the other end of the chamber to an outlet-(14). In an alternate orientation of the valve rod-(17) a flow path is formed from the inlet-(16) to the other end of the chamber-(2) and the first end of the chamber is connected to an outlet-(15).